Philips
LCD widescreen monitor

19" wide
WXGA+

190CW9FB

SmartImage™
2ms
12,000:1 Dynamic contrast ratio
AUTO PICTURE
TrueVision
USB Connectivity
TCO'06 DISPLAYS
HDCP ready
CERTIFIED FOR Windows Vista™

# Stylish wide display for home computainment

Eye-pleasing, wide display: Stylish design and a host of smart features that elevate LCD viewing to new heights of picture perfect performance for every kind of content make 190CW9 your best computainment choice.

### Outstanding front of screen performance
- SmartImage: For an optimized display experience
- Fast response time up to 2ms
- Dynamic contrast12000:1 for incredible rich black details
- TrueVision ensures top quality LCD display delivered to you
- DVI-D input and HDCP support

### Designed for elegance
- Glossy finish to enhance your decor

### Green design
- Complies with TCO'06 safety and visual ergonomics standard

### Great convenience
- Dual input accepts both analog VGA and digital DVI signals
- Hassle-free display performance tuning with SmartControl II
- One-touch format switching between wide and 4:3 ratios
- USB port for convenient peripheral connections

PHILIPS
sense and simplicity

LCD widescreen monitor
19" wide WXGA+

# 190CW9FB/93

## Specifications

### Picture/Display
- Panel Size: 19"/ 48.1 cm
- LCD panel type: 1440 x 900 pixels, Anti-glare polarizer, RGB vertical stripe
- Optimum Resolution: 1440 x 900 @ 60 Hz
- Maximum Resolution: 1440 x 900 @ 75 Hz
- Display colors: 16.7 M
- Brightness: 300 cd/m²
- Aspect ratio: 16:10
- Contrast ratio (typical): 1000:1
- SmartContrast ratio (dynamic): 12000:1
- SmartResponse: 2 ms (Gray to Gray)
- Picture enhancement: SmartImage
- Response time (typical): 5 ms
- Effective viewing area: 410.4 x 256.5 mm
- Viewing angle: 176° (H) / 170° (V), @ C/R > 5
- Horizontal Scanning Frequency: 30 - 83 kHz
- Vertical Scanning Frequency: 56 - 75 Hz
- Pixel pitch: 0.285 x 0.285 mm
- Video Dot Rate: 165 MHz
- sRGB

### Connectivity
- Signal Input: VGA (Analog ), DVI-D
- USB: USB 2.0 x 1
- Video Sync Input Signal: Composite Sync, Separate Sync, Sync on Green

### Convenience
- User convenience: SmartControl II, Picture format selection, On-screen Display
- Monitor Controls: Auto (Back), Auto picture, Brightness Control, Input (Down), Menu (OK), Power On/Off, SmartImage
- OSD Languages: English, French, German, Italian, Russian, Simplified Chinese, Spanish, Portuguese
- Plug & Play Compatibility: DDC/CI, Mac OS X, sRGB, Windows 98, Windows 2000, Windows XP, Windows Vista
- Regulatory Approvals: CCC, CE Mark, Energy Star, FCC Class B, SEMKO, UL/cUL, TCO '06
- Tilt: -5° to 20°
- Other convenience: Kensington lock compatible

### Dimensions
- Set dimensions with stand (W x H x D): 443 x 368 x 170 mm
- Set dimensions with stand in inch (W x H x D): 17.4 x 14.5 x 6.69 inch
- Relative humidity: 20% - 80%
- Set dimensions (W x H x D): 443 x 299 x 65 mm
- MTBF: 50,000 hrs
- Set dimensions in inch (W x H x D): 17.4 x 11.8 x 2.57 inch
- Temperature range (operation): 0°C to 40°C
- Temperature range (storage): -20°C to 60°C
- Box dimensions (W x H x D): 522 x 430 x 142 mm
- Box dimensions in inch (W x H x D): 20.6 x 16.9 x 5.59 inch
- Product weight (+stand): 4 kg
- Product weight (+stand) (lb): 8.82 lb
- Weight incl. Packaging: 5.5 kg
- Weight incl. Packaging (lb): 12.1

### Power
- Consumption (On mode): < 36W (typical)
- Consumption (economy mode): 28 W
- Consumption (Off Mode): < 0.8 W
- Complies with: Energy Star
- Power LED indicator: Operation - Blue, Stand by/ sleep -blue(blinking)
- Power supply: Built-in, 100-240VAC, 50/60Hz

## Product highlights

### SmartImage
*SmartImage is an exclusive, leading edge Philips technology that analyzes the content displayed on your screen. Based on a scenario you select, SmartImage dynamically enhances the contrast, color saturation and sharpness of images and videos for ultimate display performance - all in real time with the press on a single button.*

### 2ms GtG response time
*GtG response time is the average time that it takes for a pixel to go from one arbitrary position to another, which is the average time of transition between several sets of random color levels. Faster is better: Lower response time means faster transitions and, therefore, results in fewer visible image artifacts in the display of fast moving images. GtG response time is an important way to measure display quality of multimedia content like movies, videos and games.*

### Dynamic contrast ratio 12000:1
*You want the LCD flat display with the highest contrast and most vibrant images. Philips advanced video processing combined with unique extreme dimming and backlight boosting technology results in vibrant images. Dynamic Contrast will increase the contrast with excellent blacklevel and accurate rendition of dark shades and colors. It gives a bright, lifelike picture with high contrast and vibrant colors.*

### TrueVision
*TrueVision is industry-leading, proprietary Philips testing and algorithm technology for monitor adjustment and fine tuning, an extensive process that ensures ultimate display performance in compliance with a standard four-times more stringent than Microsoft's Vista requirements from each and every monitor that leaves the factory - not just a few review samples. Only Philips goes to these lengths to deliver this exacting level of color accuracy and display quality in every new monitor.*

### Dual input
*Dual input provides connectors to accommodate input of both analog VGA and digital DVI signals.*

### HDCP ready
*High-Bandwidth Digital Content Protection (HDCP) is a copyright protection system that is incorporated into the DVI connector. It helps stop unauthorized duplication of copyrighted content. HDCP allows you to play protected content media such as movies and concerts. It checks the signal to prevent piracy, allowing only legal copies of content to display.*

### SmartControl II
*SmartControl II is monitor-based software with an easy-to-use on-screen graphic interface that guides you through fine-tuning resolution, color calibration and other display settings including brightness, contrast, clock & phase, position, RGB, white point and - on models with onboard speakers - volume adjustments.*

### Auto picture format button
*Philips auto picture format is a button that switches from the 4:3 aspect ratio to the widescreen mode and back again to match the display's aspect ratio with your content for working with wide documents without scrolling or viewing widescreen media in the widescreen mode and distortion-free, native mode display of 4:3 ratio content.*

### Glossy finish
*An attractive, elegantly finished glossy finish that fits in with and complements your decor.*

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